WHAT IS CLAIMED IS:

1. A method of forecasting future orders of parts for products sold to customers, comprising the steps of:

determining a time-course record of orders with respect to each part and extracting low-order-rate parts whose order records show order rate to have fallen below the predetermined level;

determining from each such order record at least one parameter indicating a characteristic of orders after the order rate fell below the predetermined level, classifying the extracted low-order-rate parts into multiple categories and using the parameter indicating the characteristic of orders to calculate for each of the multiple categories an order occurrence probability distribution;

carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions to determine occurrence rate probability distributions of number of orders during a predetermined period; and

forecasting future number of orders of the low-order-rate parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period.

2. A method according to claim 1, further including the steps of:

determining a time-course record of orders with respect to each part and extracting second low-order-rate parts whose order records show order rate to have fallen below a second predetermined level higher than said predetermined level;

classifying the extracted second low-order-rate parts into multiple categories and using the parameter indicating the characteristic of orders to calculate for each of the multiple categories an order occurrence probability distribution;

carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions to determine occurrence rate probability distributions of number of orders during a predetermined period;

calculating future number of orders of the second low-order-rate parts based on

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the calculated occurrence rate probability distributions of number of orders during the predetermined period; and

forecasting the future number of orders of the second low-order-rate parts by regression analysis based on order records before order rate fell below the second predetermined level and the calculated number of orders.

3. A method according to claim 1, wherein the parameter indicating the characteristic of orders is at least one of an order occurrence interval and a ratio of number of orders.

4. A method according to claim 2, wherein the parameter indicating the characteristic of orders is at least one of an order occurrence interval and a ratio of number of orders.

5. A method according to claim 3, wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

6. A method according to claim 4, wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

7. A method of forecasting future orders of parts for products sold to customers, comprising the steps of:

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determining a time-course record of orders with respect to each part and extracting low-order-rate parts whose order records show order rate to have fallen below the predetermined level;

determining from each such order record an order occurrence probability distribution as a function of time and an order occurrence probability distribution as a function of a ratio of number of orders;

carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions to determine occurrence rate probability distributions of number of orders during a predetermined period; and

forecasting future number of orders of the low-order-rate parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period.

8. A method according to claim 7, wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

9. A method according to claim 7, wherein the extracted low-order-rate parts are classified into multiple categories and the order occurrence probability distribution is determined for each of the multiple categories.

10. A method according to claim 1, further including the steps of:
checking accuracy of the forecast number of orders; and
changing the categories based on a result of checking.

11. A method according to claim 7, further including the steps of:

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checking accuracy of the forecast number of orders; and

changing the categories based on a result of checking.

5   12. A system for forecasting future orders of parts for products sold to customers, comprising:

time-course order record determining means for determining a time-course record of orders with respect to each part and extracting low-order-rate parts whose order records show order rate to have fallen below the predetermined level;

10   order occurrence probability distribution determining means for determining from each such order record at least one parameter indicating a characteristic of orders after the order rate fell below the predetermined level, and for classifying the extracted low-order-rate parts into multiple categories and using the parameter indicating the characteristic of orders to calculate for each of the multiple categories an order

15   occurrence probability distribution;

Monte Carlo simulation means for carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions to determine occurrence rate probability distributions of number of orders during a predetermined period; and

forecasting means for forecasting future number of orders of the low-order-rate

20   parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period.

13. A system according to claim 12, further including:

25   second time-course order record determining means for determining a time-course record of orders with respect to each part and extracting second low-order-rate parts whose order records show order rate to have fallen below a second predetermined level higher than said predetermined level;

second order occurrence probability distribution determining means for

30   classifying the extracted second low-order-rate parts into multiple categories and using

the parameter indicating the characteristic of orders to calculate for each of the multiple categories an order occurrence probability distribution;

Monte Carlo simulation means for carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions to determine occurrence rate probability distributions of number of orders during a predetermined period;

order calculating means for calculating future number of orders of the second low-order-rate parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period; and

forecasting means for forecasting the future number of orders of the second low-order-rate parts by regression analysis based on order records before order rate fell below the second predetermined level and the calculated number of orders.

14. A system according to claim 12, wherein the parameter indicating the characteristic of orders is at least one of an order occurrence interval and a ratio of number of orders.

15. A system according to claim 13, wherein the parameter indicating the characteristic of orders is at least one of an order occurrence interval and a ratio of number of orders.

16. A system according to claim 14, wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

17. A system according to claim 15, wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

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18. A system for forecasting future orders of parts for products sold to customers, comprising:

time-course order record determining means for determining a time-course record of orders with respect to each part and extracting low-order-rate parts whose order records show order rate to have fallen below the predetermined level;

order occurrence probability distribution determining means for determining from each such order record an order occurrence probability distribution as a function of time and an order occurrence probability distribution as a function of a ratio of number of orders;

Monte Carlo simulation means for carrying out Monte Carlo simulation based on the calculated order occurrence probability distributions to determine occurrence rate probability distributions of number of orders during a predetermined period; and

forecasting means for forecasting future number of orders of the low-order-rate parts based on the calculated occurrence rate probability distributions of number of orders during the predetermined period.

19. A system according to claim 18, wherein the ratio of number of orders is a ratio of the number of orders after order expired to the number of orders before order expired.

20. A system according to claim 18, wherein the extracted low-order-rate parts are classified into multiple categories and the order occurrence probability distribution is determined for each of the multiple categories.

21. A system according to claim 12, further including of:
checking means for checking accuracy of the forecast number of orders; and
changing means for changing the categories based on a result of checking.

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22. A system according to claim 18, further including the steps of:

checking means for checking accuracy of the forecast number of orders; and

changing means for changing the categories based on a result of checking.